

### **REMARKS/ARGUMENTS**

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-23 are pending in the present application. Claims 11-18 have been withdrawn from consideration, and Claims 1-10 and 19-23 have been amended by the present amendment without introducing new matter.

In the outstanding Office Action, Claims 6-10 and 19-23 were rejected under 35 U.S.C. § 101; and Claims 1-10 and 19-23 were rejected under 35 U.S.C. § 103(a) as unpatentable over Thackston (U.S. Patent 6,295,513) in view of an obvious variation.

The specification has been amended to correct minor informalities and for readability. No new matter is added.

In response to the rejection of Claims 6-10 and 19-23, Claim 6 has been clarified to recite "A computer program implemented by a computer ... the computer program comprising ..." and Claims 7-10 have been clarified to recite "The computer program ..." to thereby recite statutory subject matter, and Claim 19 has been clarified to recite "A computer implemented method ..." and Claims 20-23 have been clarified to recite "The computer implemented method ..." to thereby recite statutory subject matter. Amended Claims 6-10 and 19-23 find support in the originally filed specification, claims, and drawings. No new matter is added. Accordingly, it is respectfully requested this rejection be withdrawn.

Claims 1-10 and 19-23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Thackston in view of an obvious variation. In light of the ground for rejection, independent Claim 1 has been amended to recite, among other things, "... a registering unit configured to register a maker group having interfaces configured to hand over intermediate results from an upper maker to a lower maker of makers of the maker group in a manufacturing flow of the semiconductor device ...." Similar changes have been made to other independent Claims 6

and 19. Amended Claims 1, 6 and 19 find support in Figure 1, for example. Further Claims 1-10 and 19-23 have been amended for clarification. No new matter is added. Applicant respectfully submits that the amendments to the claims have overcome the rejection for the following reasons.

Specifically, Thackston does not disclose or suggest the claimed interface (e.g., the design-layout interface between the logic designer of step S2 and the mask designer of step S3 shown in Figure 1) which is an environment or a connection through which an intermediate result (e.g., logic circuit data provided by the logic designer) is handed over from one maker to another (e.g., the claimed upper maker to the claimed lower maker) in a semiconductor device manufacturing flow. One of the advantages of providing such interface is that the interface enables a maker (e.g., the claimed lower maker) to smoothly receive and process the intermediate result from a maker in the preceding step (e.g., the claimed upper maker).<sup>1</sup> Instead, Thackston discloses a server having "a common, neutral format."<sup>2</sup> Applicant respectfully submits that the claimed interface is not neutral and common, and that the claimed interface is different from the server disclosed in Thackston.

Applicant further notes that unlike Thackston, in which parts are manufactured in a virtual collaborative environment,<sup>3</sup> the makers (e.g., the claimed upper maker) do not manufacture parts of the semiconductor device in a virtual collaborative environment. Rather, each maker (e.g., the claimed upper maker) performs its own task(s) at its respective step in the manufacturing flow of the semiconductor device.<sup>4</sup>

Accordingly, Applicant respectfully submits that Thackston fails to disclose or suggest the claimed interface "configured to hand over intermediate results from an upper maker to a lower maker in a manufacturing flow of the semiconductor device," and that even

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<sup>1</sup> See the specification, page 3, lines 23-30, for example.

<sup>2</sup> See Thackston, column 5, line 22.

<sup>3</sup> See the abstract of Thackston.

<sup>4</sup> See Figure 1 of the present invention.

if the teaching of Thackston is modified as suggested by an obvious variation, the claimed structure/method and the advantage thereby obtained is not obviated and amended Claims 1, 6 and 19 and each of the claims depending therefrom are believed to be patentably distinguishable over the reference of record.

Consequently, in light of the above discussion, and in view of the present amendment, Applicant respectfully submits that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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